

Abstracts

749

of 128 scenarios was selected from 729 possible scenarios (3 power 6) in order to test second-order interactions. Interviews with 21 healthcare professionals (nurses and nursing auxiliaries) ascertained the duration of assistance required for 18 of the 128 scenarios, selected at random. The economic perspective was that of society. The link between time spent, costs, and factor scores was derived from linear and non-linear models. These functions were applied to the 16,945 subjects in order to estimate the assistance time required. Comparisons between blind, low vision and control subjects were performed using an ANOVA with adjustments for age, number of people in the household, and number of handicaps. **RESULTS:** Average care-hours per annum were 682.7 for blind people, 261.4 hours for low vision subjects, and 147.5 for controls. The annual care budget was 6750€ for blind subjects, and 1463€ for subjects with low vision. The total mean yearly nationwide care cost to families for visual impairment was estimated at 2025.9€m. **CONCLUSIONS:** Screening and treatment programs aimed at preserving vision should benefit society and would help to reduce expenditures on assistance time due to visual impairment.

PES12

NON-MEDICAL COSTS RELATED TO VISUAL IMPAIRMENT IN FOUR EUROPEAN COUNTRIES (FRANCE, GERMANY, ITALY AND THE UNITED KINGDOM)

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OBJECTIVES: To estimate the non-medical costs related to visual impairment in four European countries. **METHODS:** Counts of visually impaired people, defined according to local rules, were extracted from National Registers, and for France from two recent nation-wide surveys realized by INSEE. Estimated numbers of non-registered persons were based on the literature and expert opinion. Estimation of non-medical cost included stay in institution, medical devices, home adaptations, burden on carer, paid home help, loss of income and social allowances related to visual impairment. Unit costs were obtained from National databases, local manufacturers and the Web. Also, in France, interviews were conducted on 21 healthcare professionals to estimate the duration of assistance required by visually impaired people. These durations were used to evaluate the cost of paid home help in each of the four countries. **RESULTS:** Visually impaired subjects in France, Germany, Italy and the UK numbered, respectively, 1.27, 0.73, 1.03 and 1.11 million, including 55.9%, 10%, 80%, and 64% non-registered persons. The institutionalization rate of visually impaired persons were 7.8%, 9.6%, 10.9% and 10.0%, respectively. Total annual costs for visually impaired people were estimated at 10,749€m, 9338€m, 12,069€m, and 15,180€m in France, Germany, Italy and the UK, respectively. The main costs attributable to visual impairment were “loss of income” (22.6% to 42.5%), “burden on carer” (23.5% to 38.6%), “paid assistance” (12.4% to 27.8%) and “social allowances” (4.8% to 8.8%). **CONCLUSIONS:** The total non-medical costs attributable to visual impairment are considerable, amounting to 8.1%, 4.7%, 12.4%, and 14.9% of the National Health expenditure of France, Germany, Italy and the UK, respectively. However, they were under-estimated because many blind people were not registered. Also, the total costs did not include allowances that should have been paid to non-registered persons.

PES13

A COST MINIMISATION ANALYSIS OF CUSTOM PAK® FOR CATARACT SURGERY

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OBJECTIVES: To compare the cost of disposable items used during cataract surgery with and without Custom Pak ® in two French public centres. **METHODS:** Custom Pak ® is a customised package that provides all the necessary disposable devices specified by a surgeon for cataract surgery in one sterile bag. An exploratory time and motion analysis of cataract surgeries at two well-known French public centres was carried out to compare operations performed with the customized versus regular set ups. The time and category of employees involved during the cataract surgery was recorded from the start to the finish of the operation. Moreover, the time costs of professionals was calculated from available information. The potential for increasing turnover to the hospitals was also estimated. **RESULTS:** The main time savings benefit with the Custom Pak® was observed during the preparation phase of the cataract surgical intervention. The mean time of surgical preparation was decreased by 10.45 minutes with a total time decreased of 16.15 minutes for the individual surgeon. The savings associated with this gain in time was estimated to be 17.63€ as compared with an incremental Custom Pak ® cost of 11.30€. During one operating session of 4 hours, the Custom Pak ® allowed the hospitals to perform 1.02 more cataract operations (n = 4.36 cataract operations without Custom Pak® and n = 5.38 cataract operations with Custom Pak®) and to increase the overall hospital turn-over by 1863€, that is, the amount paid for this extra cataract surgery to the public hospital at an additional costs of 61€ for Custom Pak® devices. **CONCLUSIONS:** Overall, the Custom Pak ® increases the productivity and potential for turnover associated with performing cataract surgery. This increased turnover easily exceeds the extra cost of the customized package.

PES26

ANALYSIS OF RUSSIAN PHARMACEUTICAL MARKET OF ANTI-GLAUCOMA MEDICINES IN THE PERIOD 2000–2003

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OBJECTIVES: To analyze the prevalence of local antiglaucoma medicines in drug-store of Russia and to make the pharmacoeconomical research on the base of large statistical selection. **METHODS:** In 2003, the total cost of antiglaucoma medicines sales in drug-stores of Russia was about 10.86m USD. The beta-blockers took the first place (\$7.0m or 64.4%). The pilocarpine analogue medicines took the second place. Their joint sales volume was \$1.8m or 16.7%. Two combined medicines Fotil and Fotil forte (Santen) were at the third place \$1.2m (10.7%). Latanoprost (Xalatan, Pharmacia-Pfizer) and Brinzolamide (Azopt, Alcon) began to be sold more active. The sales of the first, in 2003, were 3.8%. Azopt began to be sold only in 2002 and its results are \$147,878.15 or 1.35% and in 2003—\$289,265 (2.7%) The other CAI Trusopt (MSD) was pharmacoeconomical in 2002 on \$217,473.86 (1.99%) and in 2003 \$184,713 (1.7%). The portion of all other medicines in 2002 was less than 0.5%. The average price of beta-blocers is 0.7-\$2.1, CAIs about \$22; prostaglandins and their combination (Xalacom, Pfizer—sales started only in the end of 2002 year in Russian market) \$25.6 and \$26.9; combined form (timolol + pilocarpine) \$5; pilocarpine \$0.83 round the clock and the course of treatment during a one year is \$11.92 (pilocarpine) \$380.32 (Trusopt). **RESULTS:** The timolol maleate, pilocarpine

and their combination are medicines of choice for treatment of glaucoma in Russia. **CONCLUSIONS:** More attention is being paid to prostaglandins and CAIs. The information of ophthalmologist and their patients about the cost of therapy is a very important component for pharmacoeconomical decisions together with medical effectiveness of treatment. But it is rather low in Russia in whole.

EYE/EAR/SKIN DISEASES/DISORDERS

EYE/EAR/SKIN DISEASES/DISORDERS—Quality of Life/Utility/Preference Studies

PES14

RESPONSIVENESS OF SELF-REPORTED VISUAL FUNCTIONING IN AGE-RELATED MACULAR DEGENERATION (AMD) PATIENTS TO GENERAL HEALTH AND CHANGES IN VISUAL ACUITY IN A PHASE I/II RANDOMIZED CONTROLLED TRIAL OF LUCENTIS™ (RANIBIZUMAB; RHUFAB V2)

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OBJECTIVES: Evaluate association of National Eye Institute Visual Functioning Questionnaire-25 (VFQ-25) score changes with systemic comorbidities and visual acuity (VA) changes in neovascular AMD patients in a phase I/II randomized controlled trial of Lucentis™ (ranibizumab; rhuFab V2). **METHODS:** At baseline and three months, 57 patients completed the VFQ-25 (self-reported visual function) and VA was measured. The presence of seven comorbidities was recorded at baseline. VA score (number of lines read) was converted to a weighted log of the minimum angle of resolution (0.25 worse eye logMAR + 0.75 better eye logMAR). To estimate the relative association of changes in VA and comorbidities with changes in VFQ-25 scores, separate regression models of three-month changes in each subscale score on the logMAR scores were developed for each comorbidity. **RESULTS:** Mean number of comorbidities was 3, including: 25 (44%) hypertension, 24 (42%) arthritis, 14 (25%) hearing loss, 12 (21%) diabetes, 12 (21%) psychiatric disease, 12 (21%) back pain, 11 (19%) cancer. Due to small sample size, only VA estimates in the regression were significant after controlling, individually, for the comorbidities. For all models, a one-line (0.1 logMAR) worsening in VA was significantly associated with decreased subscale scores, particularly those related to central vision (Near Activities, Distance Activities). VA alone explained 11% of the variation in the VFQ-25 change between baseline and 3 months in the Near Activities subscale. Inclusion of an individual comorbidity improved the explanatory power of the models slightly (r^2): to 12% for hypertension, hearing loss, diabetes, psychiatric disease, cancer, and back pain, 13% for arthritis subjects, and 14% when summing all comorbidities a patient had. **CONCLUSIONS:** Some selected VFQ-25 subscale scores were decreased with the presence of visual impairment and comorbidities. Systemic diseases should be included in VFQ-25 assessments to control for differences between patients and samples.

PES15

IMPACT OF ATOPIC DERMATITIS ON PARENT&PSI;S QUALITY OF LIFE AND USE OF DIRECT RESOURCES IN PATIENTS BETWEEN 2 AND 12 YEARS OLD. DAES STUDY

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OBJECTIVES: Assess the impact of atopic dermatitis (AD) on parent's quality of life (QoL) and use of health direct resources in patients between 2 and 12 years old. **METHODS:** An observational burden-disease study of nine months of follow-up in which AD patients 2 to 12 years old were included according to Hanifin&Rajka diagnostic criteria. Four visits were conducted per protocol (baseline, 3, 6, 9 months). Disease severity was assessed by Investigator's Global Assessment(IGA). Parents' QoL was assessed by Parents Index of Quality of Life Atopic Dermatitis (PiQoL-AD) and by Visual Analogue Scale(VAS) of the EQ-5D questionnaire. Use of direct resources in the last three months were assessed retrospectively by medical files data or direct interviews to patients' parents. **RESULTS:** Results are referred to baseline visit. A total of 240 children with AD were included in the analysis, with mean age (SD) 5.3 (2.7), 52% were boys. The most frequent careers were mothers (87.8%), 36.24 (4.9) years older (mean(SD)). 19.18% of patients had clear or almost clear AD (IGA < 2), 31.25% had mild disease (IGA = 2), 37.91% had moderate disease (IGA = 3) and 11.68% had severe or very severe disease (IGA = 4 or IGA = 5). Disease severity had a significant impact on parent's QoL: mean scores of PiQoL-AD questionnaire increased 4.9 points and VAS score decrease 16.28 points ($p < 0.5$), indicating a worsening health state. In the last 3 months, 79.69% of patients required medical assistance, mainly from paediatricians or dermatologists; 81.84% pharmacological treatment and 24.11% laboratory tests, 17.61% unscheduled visits and 12.73% went to the Emergency Department. Use of direct resources increased with severity ($p < 0.5$). **CONCLUSIONS:** Parents' QoL tends to reduce progressively from mild AD states while resource utilization increases progressively. Proper management of AD may help maintain patients in less severe disease states, reducing the negative impact on quality of life and on resource utilization.

PES16

SCALING PROPERTIES OF THE DERMATOLOGY LIFE QUALITY INDEX (DLQI)

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OBJECTIVES: The Dermatology Life Quality Index (DLQI) is a widely-used HRQL measure. The instrument is intended for use by patients with any skin disease. The aim of this study was to assess the scaling properties of the DLQI and whether it is free from differential item functioning (DIF). **METHODS:** DLQI data collected in atopic dermatitis (AD) and psoriasis studies in the UK were subjected to Rasch (one-parameter logistic item response theory) analysis. Fit to the Rasch model was examined via χ^2 statistics and assessments of DIF related to gender, age and type of skin disease were made. **RESULTS:** Sample: Psoriasis study: $n = 148$ (49.7% male; mean age 45.1 \pm 14.9; mean illness duration 20.9 \pm 13.5; mean DLQI score 8.7 \pm 6.7); AD study: $n = 286$ (29.4% male; mean age 44.9 \pm 16.4; mean illness duration 29.0 \pm 16.7; mean DLQI score 7.0 (\pm 5.1)). The DLQI showed significant misfit to the Rasch model in psoriasis and AD—indicating that the instrument is not unidimensional. Several DLQI items exhibited DIF by age and gender. Four of the ten items in the measure exhibited DIF by disease. **CONCLUSIONS:** The DLQI was found to misfit the Rasch model in both patient samples, indicating that it is unsafe to use the total score on the measure. Its validity is further compromised by DIF associated with age and gender which indicates that items work differently with different subgroups of patients. For example, the item "How much has your skin influenced the